An Approach for Comparing Social Media Marketing Intelligence Platforms

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Abstract

Despite the rapid adoption of social media by consumers and companies, Marketing Intelligence still relies in most organizations on competitors' websites and magazines of reference, and rarely on social media platforms. Thus, there is room for improvement to demonstrate the efficacy of utilizing social media to add value to market intelligence. We selected social media tools to search and/or to scan and analyze sources such as Twitter and Facebook. Thus, we created a framework to evaluate social media intelligence tools based on key performance criteria. Our results underline the value added of social media for Marketing Intelligence. Moreover, we provide a benchmark that could inspire other marketers from private or public organizations.

Keywords

Marketing Intelligence, Social Media Intelligence, Social Media analytics and monitoring platforms evaluation framework.

Introduction

The use of social media platforms and websites to promote products, services, and the whole brand has already taken root within the majority of companies' marketing strategies. A survey carried out on 5,000 marketers by Stelzner (2016) shows that 90% of marketers stated that social media is important to their business. The main reason is that social media keeps on growing and evolving. Facebook is now reaching more than 2 billion monthly active users. Instagram has 600 million active users worldwide, while Twitter is "fatiguing" according to Forbes with 317 million active users, often outperformed by Reddit (Demers, 2016).

Social marketing has changed the advertising landscape since consumers are becoming increasingly immune to traditional advertising. It has become virtually impossible for brands to naturally appear high on newsfeeds without an efficient social marketing strategy. Audience tracking now enables brands to reach only the specific target market of customers who are interested in them. Today, not having a social marketing strategy has become harmful.

Social media gather an extremely large audience and provide individuals the opportunity to share their ideas, interests, opinions, and give some feedback on an unprecedented scale. This customer-generated data is easier to access because customers are not asked for information which reduces the forms of bias found in traditional approaches like phone interviews, as complaints and questions are now produced in real time and in a scalable way. This large volume of data associated with customers, competitors, industries and technology is free to access. Consumers increasingly rely on user-generated feedback comments and reviews to evaluate products and services before purchasing. For instance, in

2015 Facebook influenced 52% of customers' online and offline purchases, up from 36% in 2014 (Chaffey, 2017).

Therefore, it has become of paramount importance for companies not only to monitor those discussions about them on social media, but also to track opinions about their competitors. B2C companies were the quickest to include social media in their marketing strategies because these applications are channels enabling brands to interact with users, engage with customers, and build communities of fans. Social media offer them efficient customer segmentation based on user information, preferences and behaviors.

To get insights from social media, marketers need marketing intelligence tools and methods. Bisson (2013) defines marketing intelligence as the "art and science of legally collecting external and internal information, according to pre-defined operational, tactical and strategic needs, and the analysis and dissemination of the information and knowledge created to optimize the understanding of the Marketing game, help to anticipate opportunities or threats, and take the right decisions in order to produce wealth".

However, the volume of data created by social media is huge and a main source of socalled "Big Data". Even today, marketing departments of many companies still have a hard time figuring out how to integrate social media into their marketing intelligence strategy as they feel powerless to make any sense of it. Furthermore, Fan and Gordon (2014) emphasize the "peril" for businesses of ignoring social media content, especially when social media increasingly supports the co-creation of products and services, with the feedback of opinions, interests, and ideas provided by online users.

Currently, the most common methodological framework utilized in Social media intelligence in the literature is Identify, Capture, Understand and Present (see Chong et al., 2015). Our study proposes a new framework based on key performance criteria allowing one to compare social media intelligence tools that could inspire market intelligence managers and market strategists in their endeavor to integrate social media information.

The remainder of our work is as follow: After a literature review we underpin our methodology and results, then discuss them to provide some concluding remarks and further work to be undertaken.

Literature review

Social media intelligence is the advanced level of social media monitoring and analytics. It involves the use of actionable information from social media to support decision makers (Zeng et al., 2010; Moe & Schweidel, 2014). Harryson et al., (2012) suggest that social media intelligence must lead to strategic decisions based on the analysis provided by social media analytics. Marketing intelligence strategies applied in social media have a significant impact for B2C and B2B companies on a huge variety of application fields and encompass: i) Event detection: events that are real world happenings which occur within similar time periods and geographical locations, and that have been mentioned by the online users in the form of images, videos or texts, according to Trainor et al., (2013). Companies must remain aware of all social media mentions of events concerning their own brand in order to anticipate issues or crises, and of events concerning their competitors; ii) Issue and crisis-management: a company is often aware of an issue before it goes viral, but more frequently a crisis breaks outside of the company itself. In both cases it is vital for a company to get accurate information as quickly as possible. The company must therefore be on social media in order to quickly identify the crisis, analyze user reactions, and finally make an appropriate response starting with an acknowledgement. The worst thing a company can do when faced with a crisis is to ignore it. There are countless examples of company communication disasters starting with seemingly harmless Twitter and Facebook tantrums, which should never have been ignored. Companies should monitor the social mentions of their name on social media,

and if a spontaneous and unusual amount of mentions pops up out of the blue, an alert should be sounded immediately; iii) Reputation-management: a brand is nothing in itself, it is actually the sum of what people think and speak of it. Customers are turning to social media outlets to unleash their frustration or questions. 78% of people who complain to a brand via Twitter expect a response within an hour (Stelzner, 2016). Each and every brand must be actively engaged on its social networks in order to control the company e-reputation as much as possible and improve brand awareness; iv) Trend and market research: in order to anticipate threats and opportunities, companies can gather some useful data on social media from their partners and competitors; v) Competitor analysis: a large amount of data can be gathered from social media in order to build a competitive analysis: in addition to the official competitors, companies must look for "curators" and experts whose publications of publications provide free and valuable information; vi) Campaign monitoring: campaign tracking gives a clear understanding of the success of a costly marketing campaign by following how the campaign resonates with the audience. It gives information on the profile of the people who reacted to the campaign, how they reacted, and how the campaign influenced customers to purchase the product or service; vii) Detection of influencers: every company must identify the main influencers of their customers or potential customers. These influencers are sometimes called evangelists in the literature; viii) Customer relationship management: the combination of existing CRM systems with social media technology has given way to a new concept of CRM that incorporates a more collaborative and networkfocused approach to managing customer relationships (Oh et al., 2015).

The work of Lacoste (2016) shows that B2B firms have been slower than their B2C counterparts to use social media. Indeed, B2B often utilize a Key Account Management approach for complex business relationships with specific "strategic" customers who are probably not yet reactive or even present on social media. However, Lacoste (2016) also shows that B2B salespersons are more interested than their B2C counterparts when it comes to prospecting, handling of objections and following-up on after sales possibilities that social media offer.

More challenging is sentiment analysis as it aims to automatically understand the feeling of consumers about the brand, the product and/or service. In relation to this, He et al. (2013) created a benchmark to identify top companies in a specific industry. Furthermore, they used text mining to perform competitive analysis for the user-generated data on Twitter and Facebook for three major pizza chains. This showed the positive outcomes of using social media for these companies not only to promote their products, but more importantly to bond with customers.

He et al., (2015) apply the framework of social media competitive intelligence to enhance business value and market intelligence, for two of the largest retail chains in the world (Walmart and Costco). Developing social media data applications for marketing intelligence is a real business opportunity. They present tools made by VOZIQ which aim to help companies benchmark against peers using social media. They highlight a few issues like those caused by sarcastic and ironic sentences, or the spamming of positive or negative reviews, which dupe sentiment benchmark analysis. In the same vein, Omand et al (2012) propose a framework to validate Social media intelligence in the intelligence family, by building a solid and methodological bedrock of "evidence, verification, understanding and application" and legitimately manage the moral hazard it entails.

In order to select social media intelligence tools, Kasper (2010), Plum (2010), Gilliat (2010) and (Hofer-Shall (2010) developed some frameworks. However, these are outdated due to the fast development of market triggering new functionalities, takeovers and the arrival of new solution providers (<u>Stavrakantonakis</u> et al., 2012), and also they focus only on social monitoring.

Therefore, we propose a new framework to evaluate social media analytics and monitoring platforms based on key performance criteria appropriate for marketing purposes in order to help anticipate market shifts and optimize marketing decisions.

Methodology

The tools explored were selected from <u>http://www.razorsocial.com/</u> which is a leading website about social media and our selection was based on the following criteria: They allow the use of free applications; the signing in process needs to be quick and shouldn't require any professional email address or credit card information. Moreover, the interface should only require the entrance of either the name of a company the user wants to monitor, a topic of interest (product, industry, etc.), or a hashtag, and the tool should generate automatically the report without any intermediary step. The purpose of these criteria were to enable any reader of this article to get a personal idea of these tools rapidly and efficiently. The selected tools are: Hashtag.me, Buzzsumo, Social Mention, TweetReach, How Social, Tweet Binder, Web Mention, and Twitonomy.

The variables chosen in this paper to test these social media monitoring tools are the following: industry: aerospace, company: NASA, hashtags: #NASA.

Although some frameworks exist to compare social media intelligence monitoring such as the one of Forrester (Hofer-Shall et al., 2010) which is based on the current offering (services and features offered), strategy (how they address enterprise-level needs) and market presence, we propose a new one based on the following criteria: i) The functionalities are all options offered by the social media platform, encompassing the variety of sources used; ii) The Analysis performance focuses on brand monitoring, reputation management, consumer segmentation, customer insight, market research and competitive analysis; iii) The ease of use investigates if the user interface is intuitive, generates results quickly and provides some help windows near each functionality for instance; iv) The price of the full application; v) The support evaluates the assistance offered by the staff working on the website to users. Furthermore, the scope of the free trial is a moderating variable.

We firstly describe the functionalities and analysis of the selected social media intelligence tools through some examples. Thereafter, we summarize our findings for the 5 key performance criteria in a table where each criteria has been evaluated using a 10 point Likert scale, allowing a ranking of the performance of these social media intelligence platforms.

Results and discussion

Hashtag.me

The website application hashtagify.me requires only the entrance of a hashtag. It could be a company (#NASA) or a topic of interest (#spacerocket). After entering the hashtag, the application generates a report with four main tabs. The first one shows the related hashtags in the form of a graph where the selected hashtag is in the center in red and linked to the others. The related hashtags have a size corresponding to their level of popularity. The distances between the red hashtag in the center and the related hashtags are proportional to the correlation between them. Instead of a graph the user can choose to see the same results in the form of a table (see figure 1).

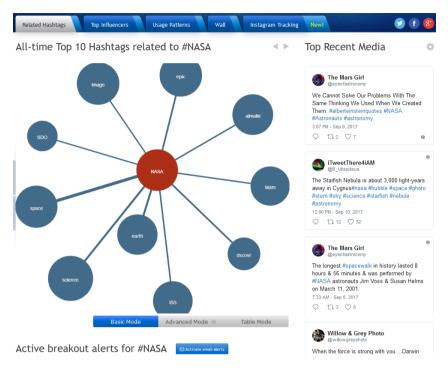


Figure 1.

The second tab presents the all-time top 6 influencers for the selected hashtag in the form of a graph with, as the ordinate axis, the user influence for this hashtag, and as the abscissa, the specialization of the user for this hashtag. This tab serves the influence mining analysis (see figure 2).





Figure 2.

Finally, the last tab is a hashtag wall for the selected hashtag, to monitor the recent activity and tweets of, in this case, NASA (Figure 3).

•	Hashtag	Popularity	Correlation 🔻	Weekly Trend	Monthly Trend \Rightarrow
	#NASA	67.5	100%	+1.6	+0.9
	#space	68.7	12.7%	+0.5	-1.2
	#science	74.4	6.7%	+0.7	-0.8
	#earth	65.2	6.5%	-1.5	-0.5
	#dscovr	50.4	4.9%	-1.0	+14.3 🔺
	#epic	69.3	4.8%	-2.5	+0.4
	#ISS	63.7	3.6%	+15.5 🔺	-0.5
	#almalki	65.9	3.4%	+2.6	-1.8
	#Mars	63.0	3.0%	+5.3 🔺	-3.3
	#image	69.4	2.8%	+1.8	-0.7
	#SDO	46.0	2.6%	+12.9 🔺	-4.1



Buzzsumo

Buzzsumo only requires the user to enter a topic or a domain (big data, content marketing, aerospace etc.) of interest and generates a report organized in 5 main tabs. The first one ranks articles related with the topic or domain entered, sorted by total shares, Facebook engagements, LinkedIn engagements, Twitter shares, Pinterest shares or number of links. The results can also be filtered by date (24h, past week, past month, past 6 months, past year, past 5 years or specific range), by language, by country, by word count, by domain, and by content type. The second tab is "Trending now" which lists all the trending topics in a time range. The results are filtered by domain (Everything, sports, entertainment, tech, business, science etc.), but the user can also add a "filter topic" to only show trending articles related to its interest. The third tab is "backlinks" and allows content amplification analysis such as by individuals who share content and by the sites that link to the content. It enables the user to see who is linking to the content (see figure 4).

] Projects Most Sha	red Trending N	low Backlinks	Content Analysis	Facebook Analyzer	Question Analyzer New							
Filter by Date ① 24 Hours Past Week	Mos	st Shared								() A	bout Most Shar	
Past Week	Nasa	Nasa Q Search Options 🗸									Page 1 of 265	
 Past 6 Months Past Year 	How to ru	How to run an Advanced Search V										
Past 5 Years	© пр	① Tip: You can ignore video results by unchecking "Videos" in the filters to the left										
One Result Per Domain) Sort by	Total Shares \vee				Facebook Engagements	Linkedin Shares	Twitter Shares	Pinterest Shares	Number of Links	Total Shares ↓	
Language ①	Re	turns To Earth		aut Peggy Whitso y : NPR	ව III Save ි View Back Ω View Share		76	ТК	4	•	41.3K	
Country (TLD) ①	>	-	"Deemederr bi	Ion" Droves The I	7lite 🗆 -							
Word Count ①	>			'Doomsday Map" Proves The Elite A Cataclysmic Event	S View Back		•		3		25.5K	
Filter Domains ①		Mr Robot – Sep 9, 201 Ingroup.org	7		<u>़</u> View Shar व्ह Share	ars 20.0K					20.0K	
Content Type ①	>				. 🗌 Save							
Apply Filters	By	ac Ruto ditche Joel Muinde – Sep 8, 2 zentv.co.ke		bilee - Citizentv.	co.ke		1	104	0	•	23.2K	

Figure 4. Buzzsumo "Most Shared" tab results for "NASA"

The fourth tab is "content analysis". By entering a term or a domain, Buzzsumo applies automatically content analysis over a maximum of 15,000 articles. The report gives the number of total shares of those articles related to the topic (here NASA), the average shares by platforms (Facebook, Twitter LinkedIn, Pinterest), the average shares by content type (all, article, list, video, etc.), the total shares by date published, the average shares by content length, a list of the most shared domains by network (all, Facebook, Twitter, LinkedIn, Pinterest) with a graph illustrating the top domains on all networks, the popular topics for content related to "NASA" on the different platforms, the average shares by topic on all networks (here the topics are "Darkness, November, Days, air, Watch ,Zodiac, Engineer, Women, Hubble, Planet" for NASA (See figure 5). The fifth tab is an analyzer specific to Facebook. It shows in the form of graphs, the most popular post type (for NASA its videos), the most popular post length, the most popular day, the most popular time to post, the estimated monthly total interactions, the average engagement per post type, the average engagement per character range, the day posted and average engagement, the time posted and average engagement, the estimated monthly average interactions, and finally the top Facebook posts for "NASA". Buzzsumo also offers an influence analysis on Twitter, which lists the most important influencers ranked by page authority, the domain authority, the number of followers, the retweet ratio, the reply ratio and the average retweets.

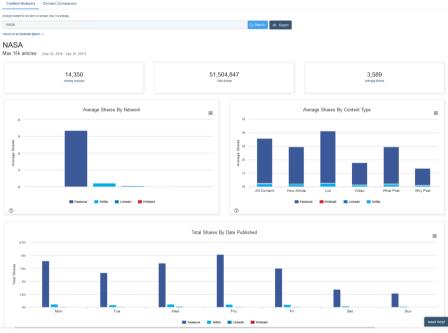


Figure 5. "Content Analysis" for "NASA"

Finally, the tool provides a "monitoring tab" showing the number of mentions today of the selected topic, the number of mentions in the last 7 days with a growth percentage, the number of mentions in the last 30 days, a total mention graph over a month and a list of all mentions that can be sorted by date published, and engagements on all social media platforms (figure 6).

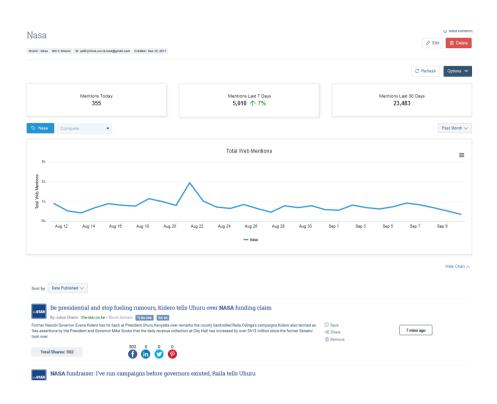


Figure 6. "Monitoring" tab for "NASA"

Social mention

Social Mention is a social media monitoring tool that lists all mentions of a selected brand, topic, domain, company, etc. on social media platforms, on blogs, on microblogs, on bookmarks, but also includes images and videos. The list can be sorted by date or source. The website application offers analysis of this data: sentiment analysis, reach percentage, strength percentage, and passion percentage. It visualizes the overall sentiment, the main sources, the top users (network analysis), the top hashtags, and the top key words (content analysis). It gives an RSS feed on the page generated, as well as an Email alert. The sentiment analysis, the top keywords, users and hashtags can be extracted in the form of .csv files (Figure 7).

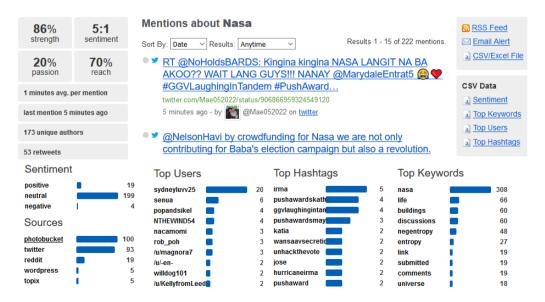


Figure 7. Social Mention interface

Tweet Reach

By the entering of a hashtag, an account, or a keyword, TweetReach provides an analysis of Twitter. The report shows the estimated number of accounts reached, the overall exposure, a graph of the activity, the top contributors, the most retweeted tweets, and a list of all contributors and a tweets timeline (figure 8).

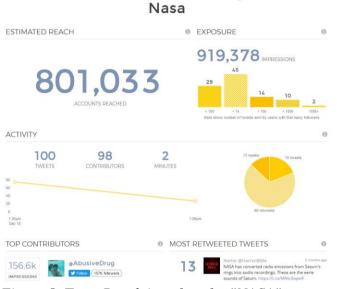


Figure 8. TweetReach interface for "NASA"

How Social

When entering a name or a brand, *how social* generates a social media brand magnitude analysis. This simple way of measuring a brand's impact on social platforms doesn't require any configuration. The tool gives magnitude scores which provide an indication of the level of activity around a brand during a selected period of time. After clicking on any magnitude score the tool provides access to historical data, but this functionality isn't free (figure 9).



Figure 9. How Social magnitude scores of "NASA"

Tweet Binder

Tweet Binder is also a social monitoring tool that uses Twitter data. Below a quick overview of the number of tweets during a selected period, the number and percentage of retweets, the number and percentage of replies, the number and percentage of links/ images, the potential impacts, the potential reach, the number of contributors, the number of followers per contributor, and the average of tweets per contributor, the tool offers an overview of the overall activity of the brand in the form of a navigable graph. The graph shows when the brand tweeted, when it got retweeted, and replied to etc. The tool also offers contributors

ranking of most active users, retweeters, the most popular accounts, the highest impact, and the top photographers (figure 10).

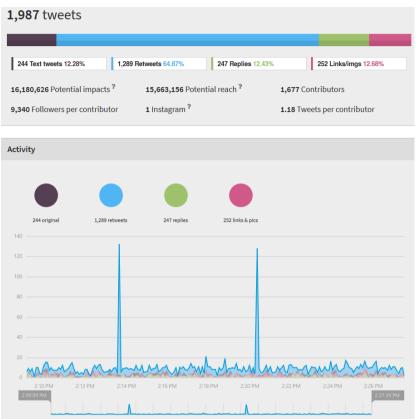


Figure 10. Tweet Binder interface for "NASA"

Web Mention

Web Mention is a very useful tool to monitor social activity from different platforms: Radio, TV, Facebook, Web, Twitter, News, Blogs, Video, forums, and Images. The two main tabs are "Dashboards" and "Influencers". The Dashboard tab includes "My Dashboards" which offers a volume analysis, a topics analysis with all the main topics discussed, the localizations of the activity on a world map, a sentiment analysis graph, a graph of the repartition of activity from different sources, the reach, an influence graph and a graph of activity on the different days of the week. This tab also offers an analysis of competition between two (or more) brands/accounts: with a share of voice graph, a share of voice over time graph, a reach evolution graph, a daily activity table, a share of voice by Location, a comparison of mentions by sources, and a sentiment analysis over time. The "influencers" tab lists all the main influencers' accounts, ranked by influence or reach, on twitter, on the web and on Instagram (figure 11.).



Figure 11. Web Mention "My Dashboards" tab for "NASA"

Twitonomy

Twitonomy allows an analysis of a selected Twitter's profile and generates useful results such as: tweets analytics (with the tweet history, users most retweeted, users most replied to, users most mentioned, hashtags most used, Tweets most retweeted, the activity over the days of the week and hours of the day, and finally the platforms most tweeted from), an overview of tweets, the main followers, and the main accounts followed (Figure 12).

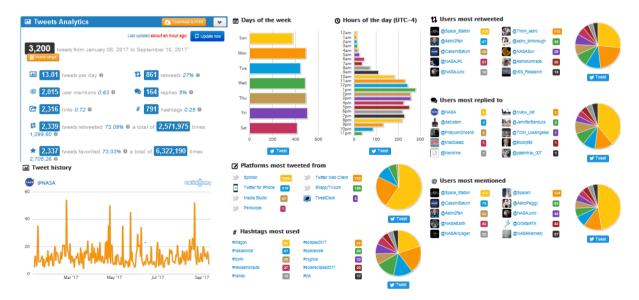


Figure 12. Twitonomy tweets analytics for "NASA"

Comparison

The following table (Table 1) lists and ranks the previously described social media intelligence tools according to the previously defined criteria. A total score of general performance is provided as the average of the scores obtained for each criteria. Furthermore, the result is moderated by the scope of the free trial.

Name	Functionalities	Analysis Performance	Ease of use	Scope of the free trial	Price	Service	Total
Hashtag.me	9	9	9	usage pattern & Instagram tracking not free	8	6	8,2
Buzzsumo	10	10	7	All free	7	9	8,6
Social Mention	6	6	9	All free	No	6	6,7
TweetReach	6	6	9	All free	7	6	6,8
How Social	5	5	7	Historic magnitude data not free	9	6	5,8
Tweet Binder	6	7	8	Analysis on 2000 tweets limitation	6	5	6,4
Web Mention	7	8	7	All free	No	6	7
Twitonomy	8	7	8	Search analytics not free	8	6	7,4

Table 1.

Thus, if we consider only what can be done with them, Buzzsumo is the best tool, followed by Hashtag.me. In addition, Buzzsumo has the best support quality. The other social media intelligence tools pretty much the same.

Even though all these websites do offer complete analysis that can guide strategic decisions, they present some limitations. Indeed, sentiment analysis is still duped by sarcastic and ironic comments or spamming.

Despite the presence of FAQ sections, there are no contact staff to answer user questions.

These tools are mostly specific to a single social media platform (e.g. Twitter or Facebook). So to get a complete overview, several tools need to be combined which makes the process more complex.

Concluding remarks

Marketing intelligence departments of companies already have tools like crawlers to collect data on their environments about keywords and often can monitor selected websites (e.g. web sites of competitors). But, few dig into social media platforms for strategic purposes and thereby use them to push and pull information from and by customers.

By presenting and comparing social media monitoring tools through their free applications, this paper shows how valuable insights from social media can be obtained by marketing intelligence units, which could be used to leverage existing intelligence obtained with existing methods and tools (e.g. crawlers and human sources). Therefore, our study might lead marketing managers of such companies to adopt social media intelligence tools (e.g. Buzzsumo) more widely and allow their firms to have a better understanding of the market game, of their strengths and weaknesses and get insights about their customers.

In addition, we provide a robust framework to evaluate social media intelligence tools that could be used for other similar studies.

Finally, further research in the form of a longitudinal study exploring the marketing results obtained thanks to data and information from social media intelligence platforms in various types of companies and sectors, could provide more tangible indications of their value for marketing strategies. The results obtained therein could trigger an upsurge in the adoption of social media intelligence platforms.

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